Patent Attorney's Docket No. 032722-651

Hecosia 2-10-04

N THE WITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Lori E. LUCKE et al

Application No.: 10/078,496

Filed: February 21, 2002

For: METHOD AND APPARATUS FOR

CONTROLLING FLUID PUMPS

Group Art Unit: 3746

Examiner: Charles Grant Freay

Confirmation No.: 4689

RESPONSE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the communication mailed February 3, 2004, Applicants respectfully request reconsideration of the withdrawal of the pending claims from examination, on the grounds that they are alleged to be directed to a non-elected embodiment.

In response to the Office Action dated June 2, 2003, Applicants elected Species 1 (Figure 19), and identified claims 1-9 and 19-24 as reading on this Species. Figure 19 pertains to an operating mode described as the "Back Off Response Mode." In this mode, a parameter such as flow or pressure is monitored while the pump is operating. If the monitored parameter exceeds a critical level, as detected at Step 1904, the speed setpoint for the pump is automatically reduced at Step 1906, and the pump thereafter operates at the new speed. Claim 1, which read upon this embodiment, recited the steps of reducing a speed of the fluid pump in response to an alarm condition, and maintaining the new speed. Independent claim

19 recited a profusion system having corresponding means for carrying out these steps.

It is respectfully submitted that new claims 30-50 are consistent with this election. For example, Step (iii) of claim 30, "detecting an alarm condition," corresponds to Step 1904 of Figure 19. Step (iv) of claim 30 "automatically reducing the speed of the pump in response to said alarm condition . . ." corresponds to Step 1906 of Figure 19. Furthermore, Steps (iii), (iv) and (v) of claim 30 correspond to the steps recited in original claim 1.

Non-elected species 2 and 3 (Figures 20 and 21) are directed to other disclosed operating modes. In these operating modes, the *user* manually adjusts the pump speed. See Step 2010 and 2110 of Figures 20 and 21, respectively. In contrast, in the Back Off Response Mode of Figure 19, the pump speed is *automatically* reduced, in response to the detection of a fault condition. Pending claim 30 recites the step of "automatically reducing the speed of the pump in response to said alarm condition." In a similar fashion, claim 43 recites "means responsive to the alarm condition for automatically reducing the set point value for said controller, to thereby cause the controller to operate the pump at a reduced speed." Since the Back Off Response Mode of Figure 19 is the mode in which the set point for controlling pump speed is automatically reduced in response to an alarm condition, it is respectfully submitted that the pending claims are clearly directed to the embodiment of Figure 19.

Reconsideration and withdrawal of the holding of non-responsiveness, and examination of the pending claims are respectfully requested.

By:

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: February 6, 2004

James A. LaBarre

Registration No. 28,632

P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620